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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/609,140	06/30/2000	Kia Silverbrook	PAK01US	2317
24011	7590	10/03/2003	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			NGHIEM, MICHAEL P	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/609,140

Applicant(s)

SILVERBROOK ET AL.

Examiner

Michael P Nghiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2002 and 09 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 51-53 is/are allowed.
- 6) ☒ Claim(s) 1-10, 17, 25-27, 30-35, 43, 50 and 54-56 is/are rejected.
- 7) ☒ Claim(s) 11-16, 18-24, 28, 29, 36-42 and 44-49 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

The Amendment filed on June 20, 2002 and July 9, 2003 have been acknowledged.

### ***Claim Objections***

1. Claim 6 is objected to because of the following informalities:

- line 3, "one only" should be -- only --.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10, 17, 25-27, 30-35, 43, 50, and 54-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Cowger et al. (US 5,565,900).

Cowger et al. discloses all the claimed features of the invention including:

- a support (Figs. 1, 2) for a plurality of inkjet printhead segments (50's), said support including:

- a hollow elongate member (24) having at least one ink supply channel (91) formed therein, the or each ink supply channel being in fluid communication with an elongate slot (slots in receiving 22's) in and extending at least partly along the elongate member (Fig. 2); and a plurality of printhead segment carriers (22's) received and secured in neighbouring arrangement within the slot (Fig. 2), each printhead segment carrier being adapted for mounting thereto of at least one printhead segment (Figs. 2, 4), wherein each printhead segment carrier includes at least one ink gallery (101) arranged so as to connect the or an associated one of said ink supply channels (Fig. 4) with an ink inlet (95) of said at least one printhead segment when mounted to that printhead segment carrier (Fig. 4);

- when mounted to the support the at least one printhead segment on each printhead segment carrier has a defined printing range in a direction lengthwise along the elongate member (Fig. 1), and wherein the printing ranges of the printhead segments mountable to a plurality of adjoining printhead segment carriers overlap (Fig. 1), thereby to define a combined printing range of greater lengthwise extent than any of the printing ranges comprised therein (Fig. 1);

- the printhead segment carriers are substantially identical to one another and have stepped terminal ends (Figs. 1, 2) thereby to enable neighbouring pairs of printhead carriers to be mounted within the slot in orientations substantially oppositely to one another in a direction transverse to the elongate member (Figs. 1, 2);

- each stepped terminal end of a carrier includes inner and outer end faces (inner and outer surfaces of steps, Figs. 1, 2) extending substantially transversely within the slot from points at least approximately midway across the slot, said inner and outer end

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faces being spaced apart in a direction along the slot (steps are spaced apart by a right angle, Fig. 2), and wherein said terminal ends are shaped mirror-symmetrically so that the outer end faces are further apart in a direction along the elongate member than the inner end faces (Fig. 2);

- each printhead segment carrier has an elongate recess (recess receiving 50) in an external surface of the carrier within which at least one printhead segment is received when mounted to the printhead segment carrier (Fig. 4) and wherein said recess extends along the carrier between ends each located longitudinally between said end faces of a terminal end (Fig. 4), whereby recesses of neighbouring pairs of carriers overlap in a direction along the elongate member (Fig. 4);

- opening into said recess of each printhead segment carrier is at least one elongate ink delivery slot (84) extending therealong, the or each of which is in fluid communication with only said ink supply channel via the or said ink gallery extending from said at least one ink slot to an opening in a rear face within the slot of the printhead segment carrier (column 4, lines 4-11, Fig. 6);

- in fluid communication with the or each ink delivery slot, there is a plurality of said ink galleries and said openings and wherein said openings associated with the or each said ink delivery slot are arranged in a row extending in a direction along the elongate member (Fig. 6);

- wherein said external surface has a second recess (recess of 62) formed therein and adapted to receive at least a part of a power or signal conductor (94) terminating on the or one said printhead segment mounted to the printhead segment carrier (column 5, lines 16-24);

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- each printhead segment carrier is mounted within the slot at a longitudinal position within a predetermined tolerance distance of a designated longitudinal position of the carrier, corresponding to a designated longitudinal position within the slot of a printhead segment when mounted to said printhead segment carrier (Figs. 1, 2);
- the elongate member is of substantially constant cross-sectional shape along its entire length (Figs. 1, 2);
- in cross-section the elongate member includes a peripheral structured wall including a base wall section (base wall of 24), and side wall sections (side walls of 24) standing out from opposing edges of said base wall section, and wherein said slot lies between free edges of said side wall sections (Figs. 2, 6).

Even though Silverbrook does not disclose the sequence of steps of assembling the inkjet printhead assembly, it has been held that determination of patentability of a product is based on the product itself and does not depend on its method of production. In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).

### ***Allowable Subject Matter***

3. Claims 11-16, 18, 19, 20-24, 28, 29, 36-42, and 44-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 51-53 are allowed.

***Reasons For Allowance***

5. The combination as claimed wherein a shim shaped to be received in the slot in the elongate member and to lie between the elongate member and said printhead segment carriers (claims 11, 36) or said elongate member further includes at least one internal web standing out from the base wall section and extending along said elongate member (claims 16, 28, 51) or said conductor comprises a tape automated bonded (TAB) film (claims 18, 44) or a first cap secured to a first terminal end of the elongate member and having an ink inlet port in fluid communication with the or an associated one of said ink supply channels (claims 20, 46) or an external protective shield plate covering the printhead segment carriers and having openings arranged to permit unimpeded passage of ink ejected from nozzles of printhead segments mounted to the carriers towards a surface passing beneath the support (claims 23, 48) or the elongate member has three, four or six of said ink supply channels, one each for a preferably differently colored ink (claims 24, 49) or said conductor is wrapped around an external surface of the elongate member and terminated on a printed circuit board secured to a side of the elongate member opposite to the printhead segment to which it is connected (claim 45) is not disclosed, suggested, or made obvious by the prior art of record.

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***Response to Arguments***

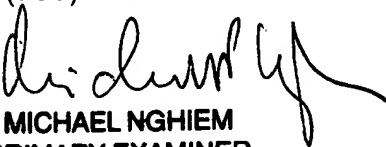
6. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Contact Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
**MICHAEL NGHIEM**  
**PRIMARY EXAMINER**

Michael Nghiem

September 20, 2003